



BUILDING CODE COMPLIANCE OFFICE
METRO-DADE FLAGLER BUILDING
140 WEST FLAGLER STREET, SUITE 1603
MIAMI, FLORIDA 33130-1563
(305) 375-2901 FAX (305) 375-2908

CONTRACTOR LICENSING SECTION
(305) 375-2527 FAX (305) 375-2558

CONTRACTOR ENFORCEMENT DIVISION
(305) 375-2966 FAX (305) 375-2908

PRODUCT CONTROL DIVISION
(305) 375-2902 FAX (305) 372-6339

PRODUCT CONTROL NOTICE OF ACCEPTANCE

Construction Glass Industries Corporation
7840 N.W. 62nd Street
Miami, FL 33166

Your application for Notice of Acceptance (NOA) of:

Series CGI 238 Aluminum Designer Fixed Window-Impact

under Chapter 8 of the Code of Miami-Dade County governing the use of Alternate Materials and Types of Construction, and completely described herein, has been recommended for acceptance by the Miami-Dade County Building Code Compliance Office (BCCO) under the conditions specified herein.

This NOA shall not be valid after the expiration date stated below. BCCO reserves the right to secure this product or material at any time from a jobsite or manufacturer's plant for quality control testing. If this product or material fails to perform in the approved manner, BCCO may revoke, modify, or suspend the use of such product or material immediately. BCCO reserves the right to revoke this approval, if it is determined by BCCO that this product or material fails to meet the requirements of the South Florida Building Code.

The expense of such testing will be incurred by the manufacturer.

ACCEPTANCE NO.: 01-0112.03
EXPIRES: 03/06/2002

Raul Rodriguez
Chief Product Control Division

**THIS IS THE COVERSHEET, SEE ADDITIONAL PAGES FOR SPECIFIC AND GENERAL
CONDITIONS
BUILDING CODE & PRODUCT REVIEW COMMITTEE**

This application for Product Approval has been reviewed by the BCCO and approved by the Building Code and Product Review Committee to be used in Miami-Dade County, Florida under the conditions set forth above.

Francisco J. Quintana, R.A.
Director
Miami-Dade County
Building Code Compliance Office

APPROVED: 03/29/2001

NOTICE OF ACCEPTANCE: SPECIFIC CONDITIONS

1. DESCRIPTION OF UNIT

1.1 This **renews** the Notice of Acceptance No. **97-0603.07** which was issued on. 03/06/98. It approves an aluminum fixed window designed to comply with the South Florida Building Code, (SFBC), 1994 Edition for Miami-Dade County, for the locations where the pressure requirements, as determined by SFBC Chapter 23, do not exceed the Design Pressure Rating values in Section 7 and within the limitations contained in Section 3.

1.2 Model Designation Series " 238" Aluminum Designer Fixed Windows - Impact Resistant Various geometrical shapes.

1.3 Configuration O

2. MATERIAL CHARACTERISTICS

2.1 Frame and Sash Material: Aluminum alloy 6063-T6.

2.2 Glazing

2.2.1 Glazing Material

2.2.1.1 Non-Impact Windows:

2.2.1.1.1 3/16" annealed glass,

2.2.1.1.2 3/16" tempered glass.

2.2.1.2 Impact Windows:

2.2.1.2.1 3/16" annealed DuPont *Sentryglas* R-457 glass,

2.2.1.2.2 3/16" tempered DuPont *Sentryglas* R-457 glass,

2.2.1.2.3 5/16" overall laminated glass, consisting of:

out board lite: 1/8" annealed glass,

interlayer: .090" Monsanto *Saflex* PVB interlayer

inboard lite: 1/8" annealed glass.

2.2.1.2.4 5/16" overall tempered laminated glass, consisting of:

out board lite: 1/8" tempered glass,

interlayer: .090" Monsanto *Saflex* PVB interlayer'

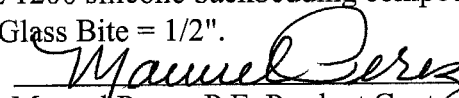
inboard lite: 1/8" tempered glass.

See Section 7 for corresponding Design Pressures and limitations.

2.2.2 Glazing Method

2.2.2.1 Non-Impact Windows: Exterior Glazed with GE 1000 silicone backbedding compound (interior and exterior side) against a 3/4" flange. A 3/4" x 3/4" x 1/8" thick aluminum. hollow tube, square or colonial shape is used as a glazing bead on the inside, secured to frame using #12 x 5/8" SS SMS located at 6" from ends and 20" o.c.max. Glass Bite = 1/2".

2.2.2.2 Impact Windows: Exterior Glazed with GE 1200 silicone backbedding compound against a 3/4" flange. The rest is as described above. Glass Bite = 1/2".


Manuel Perez, P.E. Product Control Examiner
Product Control Division

NOTICE OF ACCEPTANCE: SPECIFIC CONDITIONS

2.2.3 Daylight Opening : See approved drawings.

2.3 Sash (Vent) Construction:

2.3.1 Stiles: Consist of a vent side 1.500" exterior / .875" interior face by 2.215" deep and .100" wall thickness aluminum solid extrusion (Part # 387) with a groove for weatherstrip. A 3/4" x 3/4" x 1/8" thick aluminum. hollow tube, square or colonial shape is used as a glazing bead on the inside, secured to frame using #12 x 5/8" SS SMS located at 6" from ends and 20" o.c.max.

2.3.2 Rails: Same as the stiles.

2.3.3 Corner Construction: At the corners of the frame, all the aluminum extrusions are notched and then welded together.

2.4 Frame Construction:

2.4.1 Head: Unequal leg height 1.510" exterior / 1.625" interior face by 2.085" " deep and .100" wall thickness aluminum extrusion (Part # 386), attached to Part # 387 with 10 x 3/4" FH-SS SMS thru the interior flanges, at 6" from ends and the rest at 20" o.c. max., used as a perimeter framing member.

2.4.2 Jambs: Same as head.

2.4.3 Sill: Same as head.

2.4.4 Corner Construction : At the corners of the frame, all the aluminum extrusions are notched and then welded together.

2.5 Weatherstripping:

<u>Qty.</u>	<u>Description</u>	<u>Location</u>
2.5.1	Single <i>Schlegel</i> Q-Lon Weatherseal	Interior surface of exposed leg of Vent Panel.
2.5.2	Single 1/2" x .090" single faced glazing tape.	Leg of window frame that is in contact with vent.

2.6 Hardware: None

2.7 Weepholes: None

2.8 Muntins: None

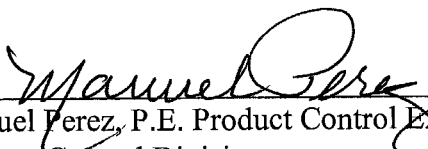
2.9 Reinforcement: None

2.10 Sealant & Pads: Perimeter Seal - *OSI Latex Caulk*.

Structural Glazing Seal: *GE 1200* Silicone Sealant - for Impact windows.

GE 1000 Silicone Seal – for Non-Impact windows.

Joint Seal – *GE 2000 Silpruf* Sealant.


Manuel Perez, P.E. Product Control Examiner
Product Control Division

NOTICE OF ACCEPTANCE: SPECIFIC CONDITIONS

3. LIMITATIONS

- 3.1** This approval applies to single unit applications only, as shown in Section 10.
- 3.2** Design Pressure Rating. To determine the Design Pressure Rating, first determine the type of glazing used and establish the category: non-impact or impact resistant window, only the types of glass mentioned below are allowed.
- 3.2.1** If it is 3/16" monolithic glass, then it qualifies as a non-impact window.
- 3.2.1** If it is 3/16" *Sentryglas*, then it qualifies as an impact window.
- 3.2.3** If it is 5/16" *Saflex* laminated glass, then it qualifies as an impact window.
- 3.3** For Design Pressure Rating vs. Window Size. Then with the category, glass type and window size, select the appropriate chart.
- 3.3.1 Non-Impact Windows:** See Comparative Analysis Section 9.1.
- 3.3.2 Impact Resistant Windows:** See Comparative Analysis Section 9.2
- Design Pressure Rating is limited by the maximum pressure cycled.

4. INSTALLATION:

4.1 Screws and Method of Attachment

4.1.1 Non-Impact Windows:

SILL : #10 x 1-1/2" PH SMS at 6" from corners and the rest at 18" on center max.

HEAD : #10 x 1-1/2" PH SMS at 6" from corners and the rest at 18" on center max.

JAMBS : #10 x 1-1/2" PH SMS at 6" from corners and the rest at 18" on center max.

4.1.2 Impact Windows:

SILL : #10 x 2-1/4" PH SMS at 6" from corners and the rest at 18" on center max.

HEAD : #10 x 2-1/4" PH SMS at 6" from corners and the rest at 18" on center max.

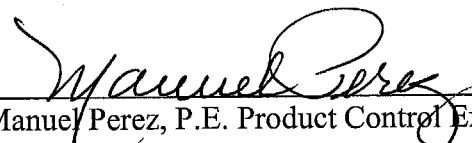
JAMBS : #10 x 2-1/4" PH SMS at 6" from corners and the rest at 18" on center max.

Note: Please see note #11, Page 3

- 4.2** Limit shim space to a maximum of 1/4".
- 4.3** Attachments of sub-bucks shall be designed by the Architect or Engineer of Records and must be in compliance with the South Florida Building Code.
- 4.4** Fasteners must be made of stainless steel or have adequate protection against corrosion, per DIN 50018. Aluminum contacting metals not considered compatible shall be properly protected.

5 IDENTIFICATION

- 5.1** Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and following statement: "Miami-Dade County Product Control Approved".


Manuel Perez, P.E. Product Control Examiner
Product Control Division

APPROVED : MAR 29 2001

EXPIRES : March 06,2002

NOTICE OF ACCEPTANCE: SPECIFIC CONDITIONS**6. USE****6.1** Application for building permit shall be accompanied by two copies of the following:**6.1.1** This Notice of Acceptance**6.1.2** Duplicate Drawing No. **238-DFW**, titled "Series 238 Designer Fixed Window," Construction Glass Industries, Corp., Sheets 1 and 2 of 2, prepared by manufacturer, bearing the Miami-Dade County Product Control Approval stamp with the Notice of Acceptance number and approval date by the Miami-Dade County Product Control Division. These plans are herein referred to as the approved drawings, and must be clearly marked to show the components selected for the proposed application.**6.1.3** Any other documents required by the Building Official or the South Florida Building Code (SFBC) in order to properly evaluate the installation of this system.**6.2 NOTE:** For hurricane protection requirement see Section 7. for corresponding window category and glass option.**7. TESTS PERFORMED****7.1 TEST: RESULTS:**

WINDOW CATEGORY: NON-IMPACT WINDOWS				
GLAZING OPTION:	3/16" ANNEALED GLASS		3/16" TEMPERED GLASS	
TEST	TEST LOADS	DESIGN LOADS	TEST LOADS	DESIGN LOADS
AIR INFILTRATION @ 1.57 PSF SFBC PA 202-94 (0.37 CFM/FT ²)	0.07 CFM/FT ² FTL-1018	-----	0.07 CFM/FT ² FTL-1024	-----
AIR INFILTRATION @ 6.24 PSF SFBC PA 202-94 (0.37 CFM/FT ²)	0.07 CFM/FT ² FTL-1018	-----	0.07 CFM/FT ² FTL-1024	-----
UNIFORM STATIC PRESSURE- DESIGN LOADS SFBC PA 202-94 POSITIVE	+60.0 PSF FTL-1018	+60.0 PSF FTL-1018	+156.0 PSF FTL-1024	+156.0 PSF FTL-1024
UNIFORM STATIC PRESSURE- DESIGN LOADS SFBC PA 202-94 NEGATIVE	-75.0 PSF FTL-1018	-75.0 PSF FTL-1018	-156.0 PSF FTL-1024	-156.0 PSF FTL-1024
WATER RESISTANCE (PSF) SFBC PA 202-94	+16.5 PSF FTL-1018	+110.0 PSF FTL-1018	+16.5 PSF FTL-1024	+110.0 PSF FTL-1024
UNIFORM STATIC PRESSURE-FULL TEST LOAD SFBC PA 202-94 POSITIVE	+90.0 PSF FTL-1018	+60.0 PSF FTL-1018	+165.0 PSF FTL-1024	+110.0 PSF FTL-1024
UNIFORM STATIC PRESSURE -FULL TEST LOAD SFBC PA 202-94 NEGATIVE	-90.0 PSF FTL-1018	-60.0 PSF FTL-1018	-190.0 PSF FTL-1024	-127.0 PSF FTL-1024
FORCED-ENTRY RESISTANCE (FER) AAMA 1302.5-76	NOT REQUIRED	-----	NOT REQUIRED	-----
Design Pressure Rating (Positive)		+60.0 PSF		+110.0 PSF
Design Pressure Rating (Negative)		-60.0 PSF		-127.0 PSF
For Design Pressure Rating vs. Window Size, see Section 9.1 "Comparative Analysis"				
The installation of this unit will require a hurricane protection system				

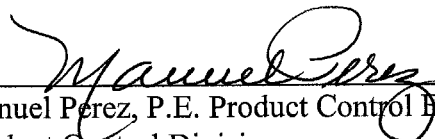
Manuel Perez
 Manuel Perez, P.E. Product Control Examiner
 Product Control Division

APPROVED : MAR 29 2001

EXPIRES : March 06,2002

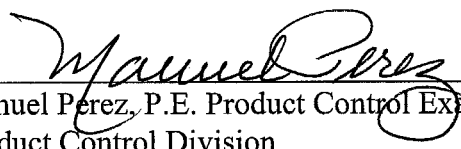
NOTICE OF ACCEPTANCE: SPECIFIC CONDITIONS**7. TESTS PERFORMED continued**
7.2 TEST: RESULTS:

WINDOW CATEGORY: IMPACT WINDOWS w/"SENTRYGLAS"				
GLAZING OPTION:	3/16" ANNEALED "SENTRYGLAS"		3/16" TEMPERED "SENTRYGLAS"	
TEST	TEST LOADS	DESIGN LOADS	TEST LOADS	DESIGN LOADS
AIR INFILTRATION @ 1.57 PSF SFBC PA 202-94 (0.37 CFM/FT²)	0.07 CFM/FT² FTL-1018	-----	0.07 CFM/FT² FTL-1024	-----
AIR INFILTRATION @ 6.24 PSF SFBC PA 202-94 (0.37 CFM/FT²)	0.07 CFM/FT² FTL-1018	-----	0.07 CFM/FT² FTL-1024	-----
UNIFORM STATIC PRESSURE- DESIGN LOADS SFBC PA 202-94 POSITIVE	+60.0 PSF FTL-1018	+60.0 PSF FTL-1018	+156.0 PSF FTL-1024	+156.0 PSF FTL-1024
UNIFORM STATIC PRESSURE- DESIGN LOADS SFBC PA 202-94 NEGATIVE	-75.0 PSF FTL-1018	-75.0 PSF FTL-1018	-156.0 PSF FTL-1024	-156.0 PSF FTL-1024
WATER RESISTANCE (PSF) SFBC PA 202-94	+16.5 PSF FTL-1018	+110.0 PSF FTL-1018	+16.5 PSF FTL-1024	+110.0 PSF FTL-1024
UNIFORM STATIC PRESSURE-FULL TEST LOAD SFBC PA 202-94 POSITIVE	+90.0 PSF FTL-1018	+60.0 PSF FTL-1018	+165.0 PSF FTL-1024	+110.0 PSF FTL-1024
UNIFORM STATIC PRESSURE -FULL TEST LOAD SFBC PA 202-94 NEGATIVE	-90.0 PSF FTL-1018	-60.0 PSF FTL-1018	-190.0 PSF FTL-1024	-127.0 PSF FTL-1024
FORCED-ENTRY RESISTANCE (FER) AAMA 1302.5-76	NOT REQUIRED	-----	NOT REQUIRED	-----
LARGE MISSILE IMPACT TEST SFBC PA 201-94	SATISFACTORY ATL-1209.01-94	-----	SATISFACTORY ATL-1209.01-94	-----
CYCLIC WIND PRESSURE TEST SFBC PA 203-94 POSITIVE (4,500 cycles)	+70.0 PSF ATL-1209.01-94	+70.0 PSF ATL-1209.01-94	+70.0 PSF ATL-1209.01-94	+70.0 PSF ATL-1209.01-94
CYCLIC WIND PRESSURE TEST SFBC PA 203-94 NEGATIVE (4,500 cycles)	-70.0 PSF ATL-1209.01-94	-70.0 PSF ATL-1209.01-94	-70.0 PSF ATL-1209.01-94	-70.0 PSF ATL-1209.01-94
Design Pressure Rating (Positive)	See Sections 9.1 and 9.4 (Use the lesser of the two.)		See Sections 9.2, 9.3 and 9.4 (Use the lesser of the three.)	
Design Pressure Rating (Negative)				
For Design Pressure Rating vs. Window Size, see Table in Section 9 "Comparative Analysis"				
Hurricane Protection Requirement: The installation of this unit will not require a hurricane protection system				


Manuel Perez, P.E. Product Control Examiner
Product Control Division

NOTICE OF ACCEPTANCE: SPECIFIC CONDITIONS**7. TESTS PERFORMED continued**
7.3 TEST: RESULTS:

WINDOW CATEGORY: IMPACT WINDOWS w/LAMINATED "SAFLEX" GLASS				
GLAZING OPTION:	5/16" ANNEALED LAMINATED "SAFLEX" GLASS		5/16" TEMPERED LAMINATED "SAFLEX" GLASS	
TEST	TEST LOADS	DESIGN LOADS	TEST LOADS	DESIGN LOADS
AIR INFILTRATION @ 1.57 PSF SFBC PA 202-94 (0.37 CFM/FT ²)	0.07 CFM/FT ² FTL-1018	-----	0.07 CFM/FT ² FTL-1024	-----
AIR INFILTRATION @ 6.24 PSF SFBC PA 202-94	0.07 CFM/FT ² FTL-1018	-----	0.07 CFM/FT ² FTL-1024	-----
UNIFORM STATIC PRESSURE- DESIGN LOADS SFBC PA 202-94 POSITIVE	+60.0 PSF FTL-1018	+60.0 PSF FTL-1018	+156.0 PSF FTL-1024	+156.0 PSF FTL-1024
UNIFORM STATIC PRESSURE- DESIGN LOADS SFBC PA 202-94 NEGATIVE	-75.0 PSF FTL-1018	-75.0 PSF FTL-1018	-156.0 PSF FTL-1024	-156.0 PSF FTL-1024
WATER RESISTANCE (PSF) SFBC PA 202-94	+16.5 PSF FTL-1018	+110.0 PSF FTL-1018	+16.5 PSF FTL-1024	+110.0 PSF FTL-1024
UNIFORM STATIC PRESSURE-FULL TEST LOAD SFBC PA 202-94 POSITIVE	+90.0 PSF FTL-1018	+60.0 PSF FTL-1018	+165.0 PSF FTL-1024	+110.0 PSF FTL-1024
UNIFORM STATIC PRESSURE -FULL TEST LOAD SFBC PA 202-94 NEGATIVE	-90.0 PSF FTL-1018	-60.0 PSF FTL-1018	-190.0 PSF FTL-1024	-127.0 PSF FTL-1024
FORCED-ENTRY RESISTANCE (FER) AAMA 1302.5-76	NOT REQUIRED	-----	NOT REQUIRED	-----
LARGE MISSILE IMPACT TEST SFBC PA 201-94	SATISFACTORY HTL-0080-0303-96	-----	SATISFACTORY HTL-0080-0303-96	-----
CYCLIC WIND PRESSURE TEST (24 sq. ft.) SFBC PA 203-94 POSITIVE (4,500 cycles)	+90.0 PSF HTL-0080-0303-96	+90.0 PSF HTL-0080-0303-96	+90.0 PSF HTL-0080-0303-96	+90.0 PSF HTL-0080-0303-96
CYCLIC WIND PRESSURE TEST (24 sq. ft.) SFBC PA 203-94 NEGATIVE (4,500 cycles)	-90.0 PSF HTL-0080-0303-96	-90.0 PSF HTL-0080-0303-96	-90.0 PSF HTL-0080-0303-96	-90.0 PSF HTL-0080-0303-96
CYCLIC WIND PRESSURE TEST (16.2 sq. ft.) SFBC PA 203-94 POSITIVE (4,500 cycles)	+110.0 PSF HTL-0080-0303-96	+110.0 PSF HTL-0080-0303-96	+110.0 PSF HTL-0080-0303-96	+110.0 PSF HTL-0080-0303-96
CYCLIC WIND PRESSURE TEST (16.2 sq. ft.) SFBC PA 203-94 NEGATIVE (4,500 cycles)	-120.0 PSF HTL-0080-0303-96	-120.0 PSF HTL-0080-0303-96	-120.0 PSF HTL-0080-0303-96	-120.0 PSF HTL-0080-0303-96
CYCLIC WIND PRESSURE TEST (9.3 sq. ft.) SFBC PA 203-94 POSITIVE (4,500 cycles)	+110.0 PSF HTL-0080-0303-96	+110.0 PSF HTL-0080-0303-96	+110.0 PSF HTL-0080-0303-96	+110.0 PSF HTL-0080-0303-96
CYCLIC WIND PRESSURE TEST (9.3 sq. ft.) SFBC PA 203-94 NEGATIVE (4,500 cycles)	-220.0 PSF HTL-0080-0303-96	-220.0 PSF HTL-0080-0303-96	-220.0 PSF HTL-0080-0303-96	-220.0 PSF HTL-0080-0303-96
Design Pressure Rating (Positive)	See Sections 9.1 and 9.5 (Use the lesser of the two.)-		See Sections 9.2, 9.3 and 9.5	
Design Pressure Rating (Negative)			(Use the lesser of the three.)	
Additional Analysis	See Sections 9.1 and 9.5		See Sections 9.2, 9.3 and 9.5	
Hurricane Protective System	NOT REQUIRED		NOT REQUIRED	


Manuel Perez, P.E. Product Control Examiner
Product Control Division

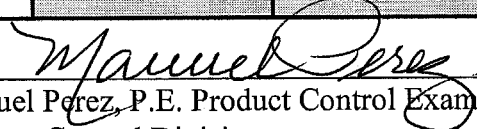
NOTICE OF ACCEPTANCE: SPECIFIC CONDITIONS

7. TESTS PERFORMED continued
7.4 TEST: RESULTS:

VERIFICATION TEST: IMPACT WINDOWS w/ 3/16" ANNEALED GLASS		
GLAZING OPTION:	3/16" ANNEALED GLASS	
TEST	TEST LOADS	DESIGN LOADS
AIR INFILTRATION @ 1.57 PSF SFBC PA 202-94 (0.37 CFM/FT ²)	0.004 CFM/FT ² HTL-0080-0502-97	-----
AIR INFILTRATION @ 6.24 PSF SFBC PA 202-94	0.022 CFM/FT ² HTL-0080-0502-97	-----
UNIFORM STATIC PRESSURE- DESIGN LOADS SFBC PA 202-94 POSITIVE	+90.0 PSF HTL-0080-0502-97	+90.0 PSF HTL-0080-0502-97
UNIFORM STATIC PRESSURE- DESIGN LOADS SFBC PA 202-94 NEGATIVE	-103.0 PSF HTL-0080-0502-97	-103.0 PSF HTL-0080-0502-97
WATER RESISTANCE (PSF) SFBC PA 202-94	+16.5 PSF HTL-0080-0502-97	+110.0 PSF HTL-0080-0502-97
UNIFORM STATIC PRESSURE-FULL TEST LOAD SFBC PA 202-94 POSITIVE	+135.0 PSF HTL-0080-0502-97	+60.0 PSF HTL-0080-0502-97
UNIFORM STATIC PRESSURE -FULL TEST LOAD SFBC PA 202-94 NEGATIVE	-154.5 PSF HTL-0080-0502-97	-103.0 PSF HTL-0080-0502-97
FORCED-ENTRY RESISTANCE (FER) AAMA 1302.5-76	NOT REQUIRED	-----
Design Pressure Rating (Positive)		+90.0 PSF
Design Pressure Rating (Negative)		-103.0 PSF

7.5 TEST: RESULTS:

VERIFICATION TEST: IMPACT WINDOWS w/ 3/16" TEMPERED "SENTRYGLAS"		
GLAZING OPTION:	3/16" TEMPERED "SENTRYGLAS"	
TEST	TEST LOADS	DESIGN LOADS
LARGE MISSILE IMPACT TEST SFBC PA 201-94	SATISFACTORY HTL-0080-0502-97	-----
CYCLIC WIND PRESSURE TEST SFBC PA 203-94 POSITIVE (4,500 cycles)	+70.0 PSF HTL-0080-0502-97	+70.0 PSF HTL-0080-0502-97
CYCLIC WIND PRESSURE TEST SFBC PA 203-94 NEGATIVE (4,500 cycles)	-70.0 PSF HTL-0080-0502-97	-70.0 PSF HTL-0080-0502-97
Design Pressure Rating (Positive)		+70.0 PSF
Design Pressure Rating (Negative)		-70.0 PSF


 Manuel Perez, P.E. Product Control Examiner
 Product Control Division

Construction Glass Industries

ACCEPTANCE No.: 01-0112.03

APPROVED : MAR 29 2001

EXPIRES : March 06,2002

NOTICE OF ACCEPTANCE: SPECIFIC CONDITIONS

8. EVIDENCE SUBMITTED

This product approval uses as reference test reports submitted in Notice of Acceptance No. 96-0417.02 dated August 15, 1996,

8.1 Tests:

8.1.1 Test reports on 1) Air Infiltration Test, per PA 202-94.

2) Uniform Static Air Pressure Test, Loading per PA 202-94.

3) Water Resistance Test, per PA 202-94.

along with installation diagram of a 48" wide x 72" high Series 238 alum. fixed window (Tombstone) glazed with 3/16" tempered glass, prepared by Hurricane Test Laboratory, report No. **HTL-0080-0502-97**, dated 05/01/97, signed and sealed by Timothy S. Marshall, P.E.

8.1.2 Test reports on 1) Large Missile Impact Test, per PA 201-94.

2) Cyclic Wind Pressure Loading, per PA 203-94.

along with installation diagram of a 72" wide x 36" high, Series 238 - Designer alum. fixed Half Circle window glazed with 3/16" tempered *Sentryglas*, prepared by Hurricane Test Laboratory, report No. **HTL-0080-0502-97**, dated 05/02/97, signed and sealed by Timothy S. Marshall, P.E.

8.2 Drawings:

8.2.1 Manufacturer's die drawings and sections.

8.2.2 Drawing No. **238-DFW**, Construction Glass Industries, Inc., " Series 238 - Designer Fixed Window, Sheets 1 and 2 of 2, prepared by manufacturer, dated Jan. 27, 1998.

8.3 Calculations:

8.3.1 Comparative Analysis and anchor calculations for Series 328 and 238- Designer Aluminum fixed Window prepared by Al-Farooq Corporation, dated 10/24/94 and 10/24/97 respectively, signed and sealed by Humayoun Farooq, P.E.

9. COMPARATIVE ANALYSIS:

9.1 For Design Load vs. Window Size of Non-Impact Windows

9.1.1 For 3/16" annealed glass, see Section 9.1

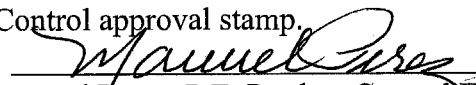
9.1.2 For 3/16" tempered glass, see Section 9.2 for Negative Loads and Section 9.3 for Positive Glass

9.2 For Design Load vs. Window Size of Impact Resistant Windows

9.2.1 For 3/16" annealed or tempered *Sentryglas*, enter window size in Supplemental Chart in Section 9.4 – point must fall under the curve.

9.2.2 For 5/16" annealed or tempered *Saflex* laminated glass, enter window size in Supplemental Chart in Section 9.5 – point must fall under one of the curves, use corresponding Design Pressure Rating.

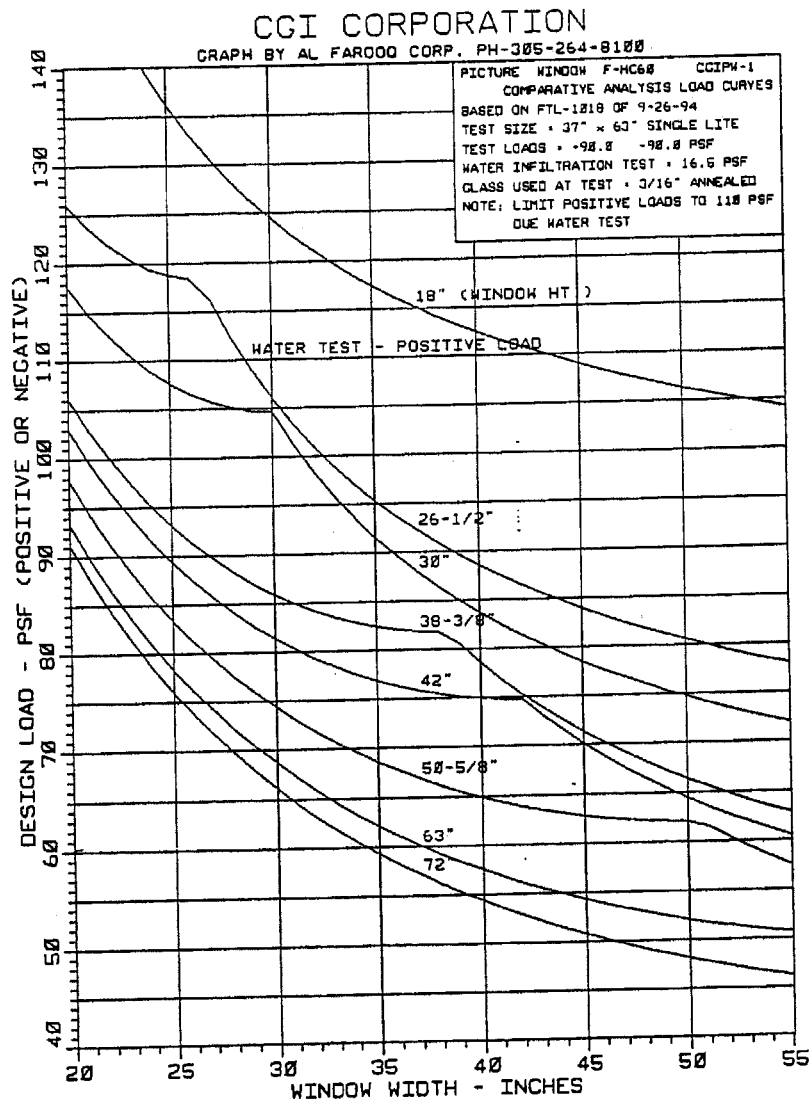
10. TYPICAL WINDOW ELEVATION AND CROSS SECTIONS: See Drawing No. **238-DFW**, Sheets 1 and 2 of 2, bearing the Dade County Product Control approval stamp.


Manuel Perez, P.E. Product Control Examiner
Product Control Division

NOTICE OF ACCEPTANCE: SPECIFIC CONDITIONS

9. COMPARATIVE ANALYSIS

- 9.1** Chart for 3/16" Annealed Glass (For Negative and Positive Loads)
(Positive Loads not to exceed 110 PSF)

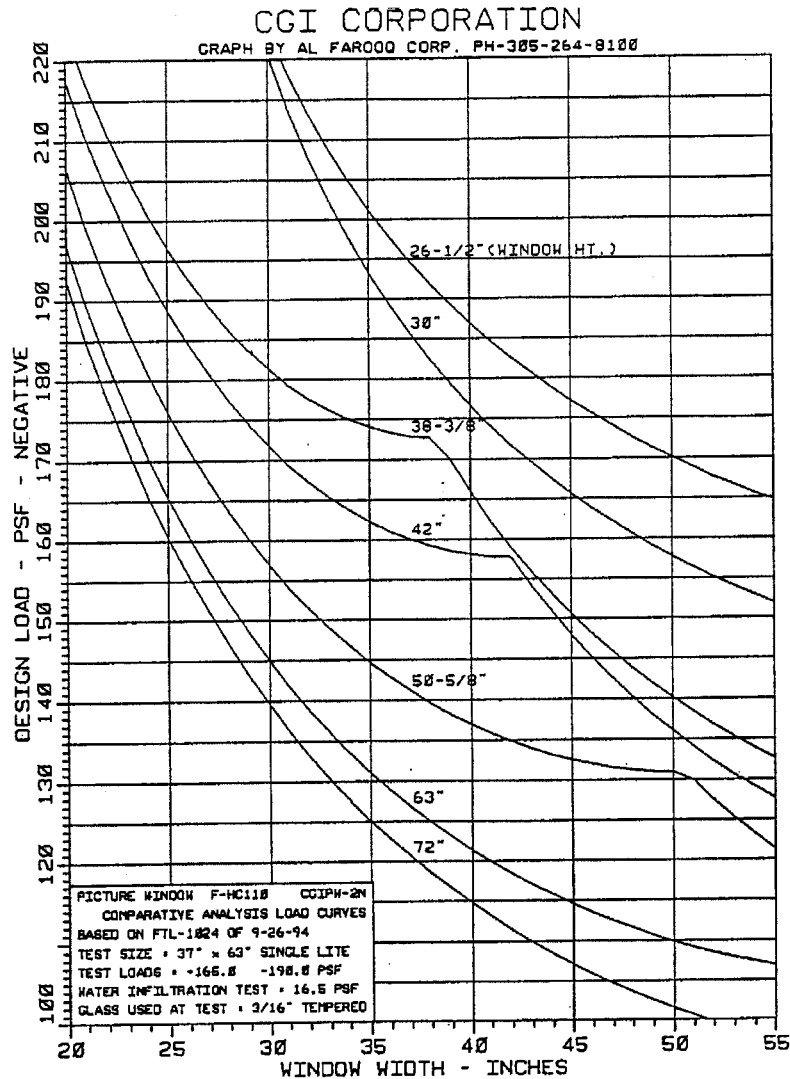


Manuel Perez
Manuel Perez, P.E. Product Control Examiner
Product Control Division

NOTICE OF ACCEPTANCE: SPECIFIC CONDITIONS

9.2 COMPARATIVE ANALYSIS

Chart for 3/16" Tempered Glass (For Negative Loads only)

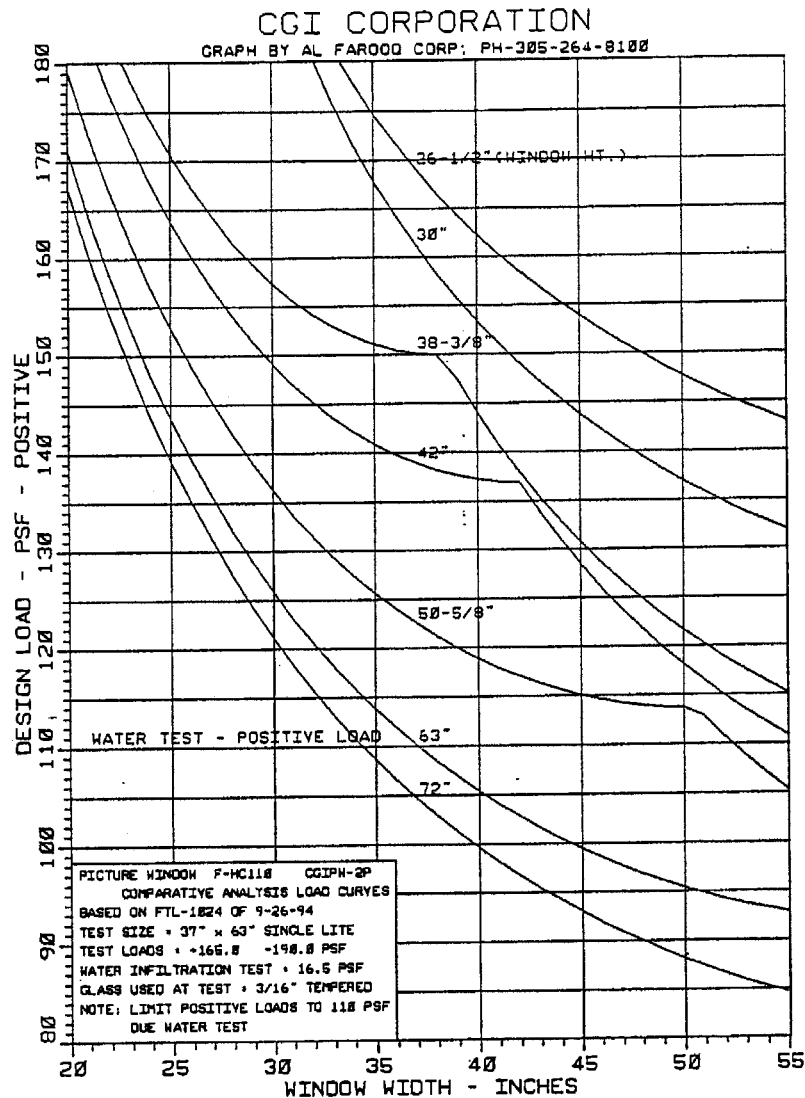


Manuel Perez
Manuel Perez, P.E. Product Control Examiner
Product Control Division

NOTICE OF ACCEPTANCE: SPECIFIC CONDITIONS

9.3 COMPARATIVE ANALYSIS

Chart for 3/16" Tempered Glass (For Positive Loads only)
(Maximum pressure not to exceed 110 PSF)



Manuel Perez
Manuel Perez, P.E. Product Control Examiner
Product Control Division

NOTICE OF ACCEPTANCE: SPECIFIC CONDITIONS

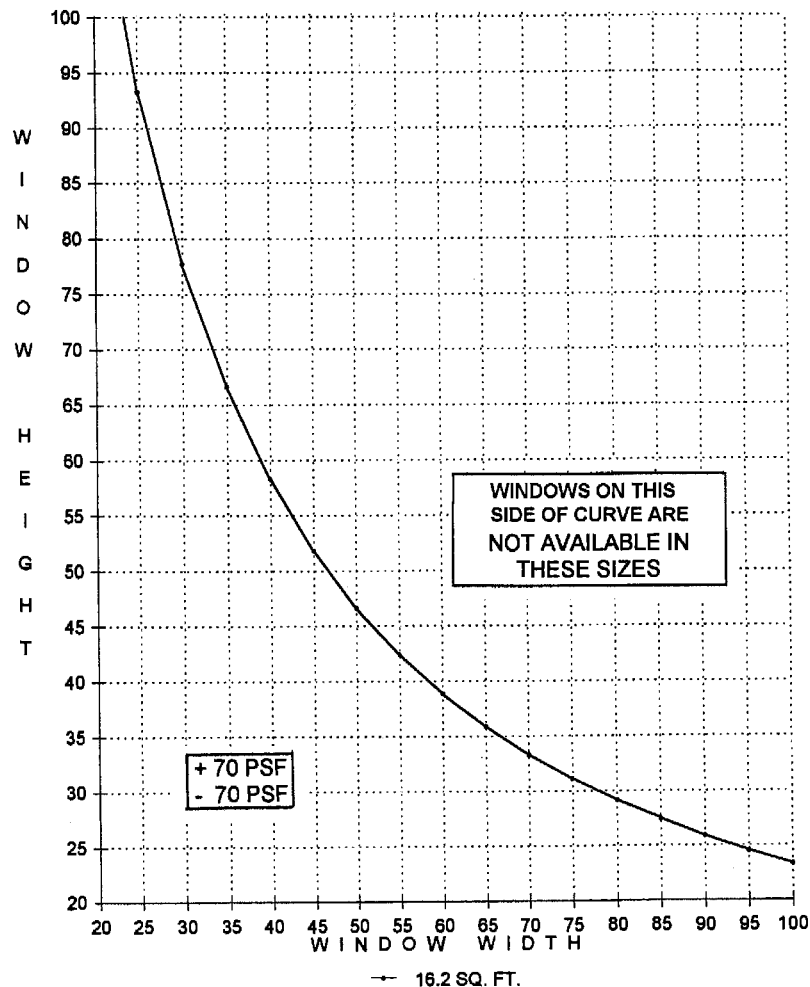
9.4 SUPPLEMENTAL CHART

Supplemental Chart for 3/16" thick Impact Resistant *Sentryglas* (Annealed or Tempered)

Maximum window area: 16.2 sq. ft. - Maximum Design Pressure Rating: +70 PSF; -70 PSF)

Refer to chart below for graphical representation. Enter window dimensions, point must fall under the curve.

SUPPLEMENTAL CHART FOR CYCLIC DESIGN WIND LOADS
GLASS TYPE: 3/16" THK. IMPACT RESISTANT SENTRYGLAS (ANNEALED OR TEMPERED)

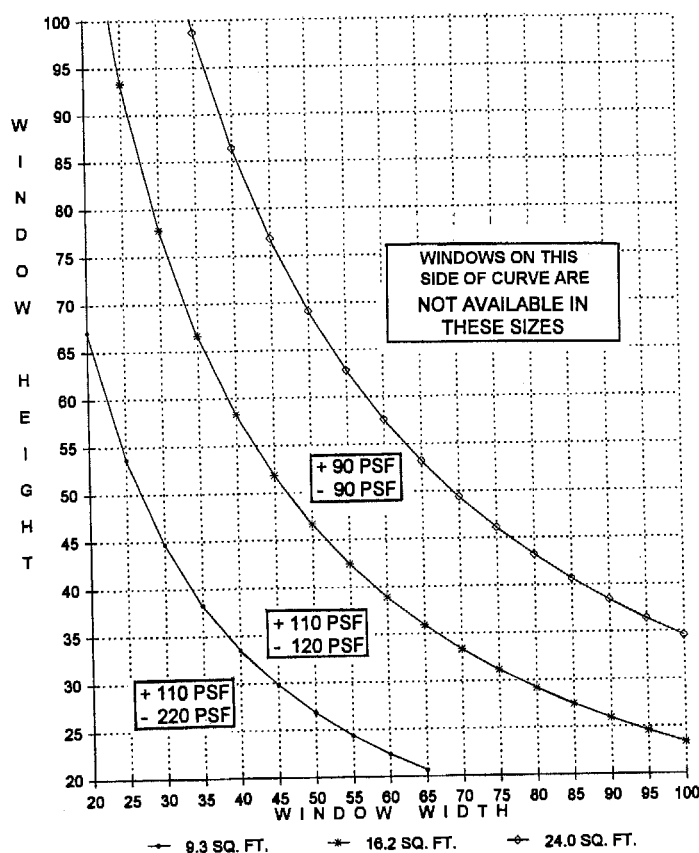


Manuel Perez
Manuel Perez, P.E. Product Control Examiner
Product Control Division

NOTICE OF ACCEPTANCE: SPECIFIC CONDITIONS**9.5 SUPPLEMENTAL GRAPH**

Supplemental Chart for 5/16" Impact Resistant Laminated with *Saflex* (Annealed or Tempered)
 (For window area up to: 9.3 sq. ft. - Maximum Design Pressure Rating: +110 PSF; -220 PSF)
 (For max. window area: 16.2 sq. ft. - Maximum Design Pressure Rating: +110 PSF; -120 PSF)
 (For max. window area: 24.0 sq. ft. - Maximum Design Pressure Rating: +90 PSF; -90 PSF)
 Refer to chart below for graphical representation. Enter window dimensions and determine Design Load in the corresponding area under the curve.

SUPPLEMENTAL CHART FOR CYCLIC DESIGN WIND LOADS
 GLASS TYPE: 5/16" THICK IMPACT RESISTANT LAMINATED (ANNEALED OR TEMPERED)



Manuel Perez
 Manuel Perez, P.E. Product Control Examiner
 Product Control Division

Construction Glass Industries

ACCEPTANCE No.: 01-0112.03

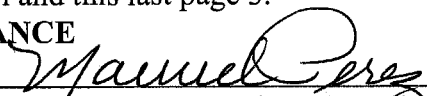
APPROVED : MAR 29 2001

EXPIRES : March 06, 2002

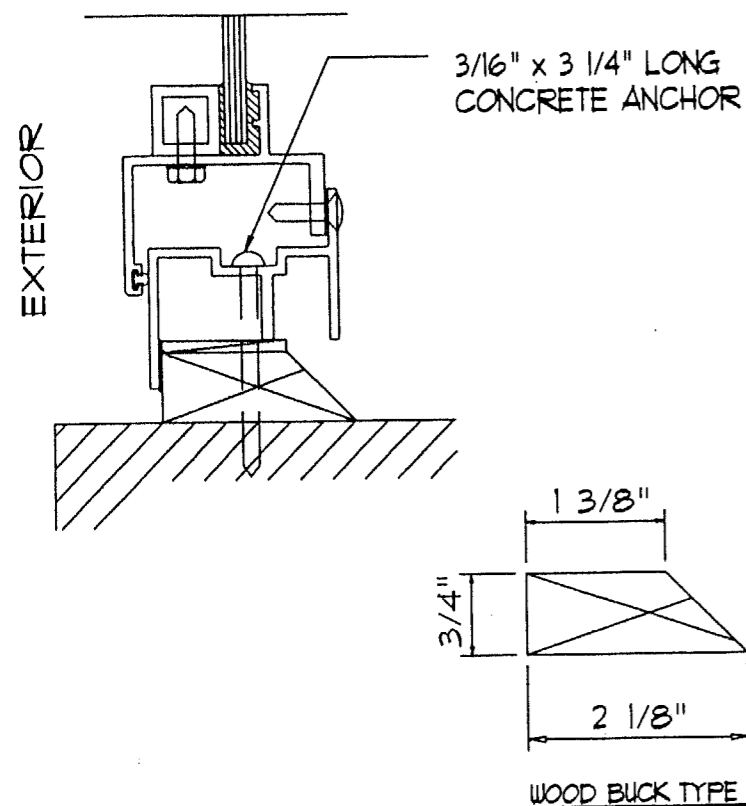
NOTICE OF ACCEPTANCE STANDARD CONDITIONS

1. Renewal of this Acceptance (approval) shall be considered after a renewal application has been filed and the original submitted documentation, including test supporting data, engineering documents, are no older than eight (8) years.
2. Any and all approved products shall be permanently labeled with the manufacturer's name, city, state, and the following statement: "Miami-Dade County Product Control Approved", or as specifically stated in the specific conditions of this Acceptance.
3. Renewals of Acceptance will not be considered if:
 - a. There has been a change in the South Florida Building Code affecting the evaluation of this product and the product is not in compliance with the code changes.
 - b. The product is no longer the same product (identical) as the one originally approved.
 - c. If the Acceptance holder has not complied with all the requirements of this acceptance, including the correct installation of the product.
 - d. The engineer who originally prepared, signed and sealed the required documentation initially submitted, is no longer practicing the engineering profession.
4. Any revision or change in the materials, use, and/or manufacture of the product or process shall automatically be cause for termination of this Acceptance, unless prior written approval has been requested (through the filing of a revision application with appropriate fee) and granted by this office.
5. Any of the following shall also be grounds for removal of this Acceptance:
 - a. Unsatisfactory performance of this product or process.
 - b. Misuse of this Acceptance as an endorsement of any product, for sales, advertising or any other purposes.
6. The Notice of Acceptance number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the Notice of Acceptance is displayed, then it shall be done in its entirety.
7. A copy of this Acceptance as well as approved drawings and other documents, where it applies, shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at all time. The engineer needs not reseal the copies.
8. Failure to comply with any section of this Acceptance shall be cause for termination and removal of Acceptance.
9. This Notice of Acceptance consists of pages 1, 2, 2a thru 2l and this last page 3.

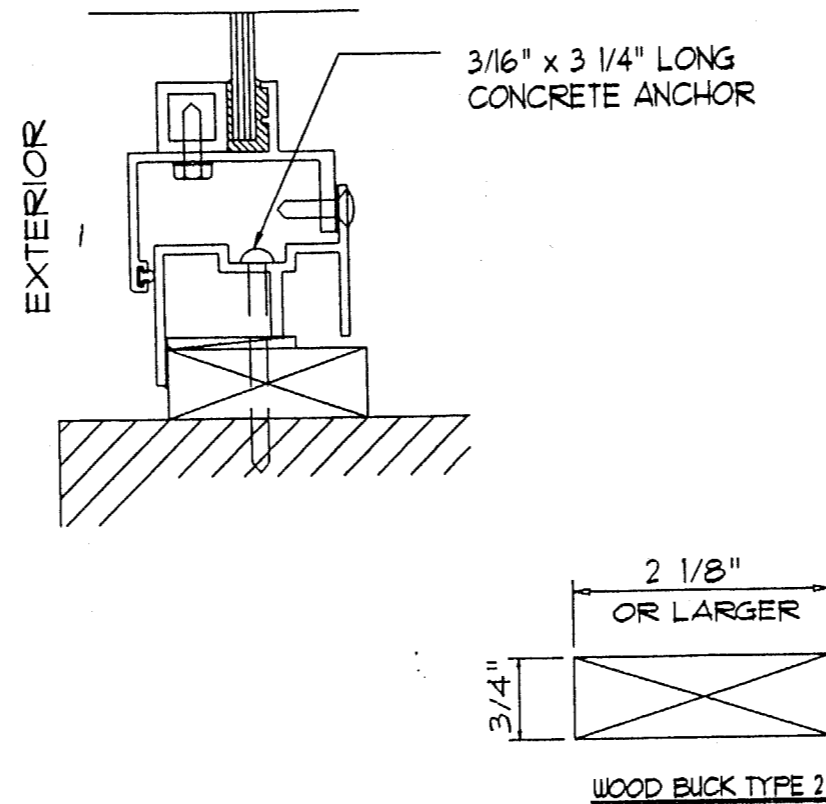
END OF THIS ACCEPTANCE


Manuel Perez, P.E., Product Control Examiner
Product Control Division

WOOD BUCK TYPE 1
INSTALLATION DETAIL ON ALL FOUR SIDE



WOOD BUCK TYPE 2
INSTALLATION DETAIL ON ALL FOUR SIDE



ALL WOOD BUCKS MUST BE PRESSURE TREATED AND SET IN BED OF SEALANT

WOOD BUCKS TYPE 1 AND 2 CAN BE SECURED WITH NAILS, SHOTS OR CONCRETE ANCHORS

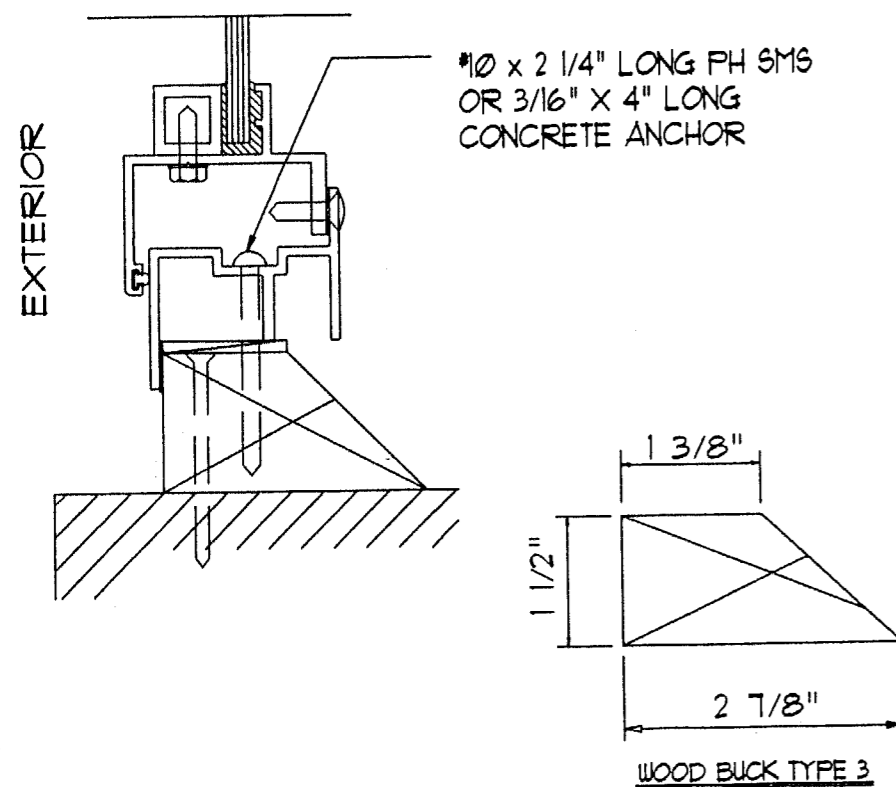
WOOD BUCKS TYPE 3 AND 4 CAN BE SECURED WITH 1/4" X 3 1/4 LG. CONCRETE ANCHORS AT 6" FROM ENDS AND 18" ON CENTERS

REFER TO SHEET 1 OF 2 FOR FULL SIZE SECTION OF WINDOW

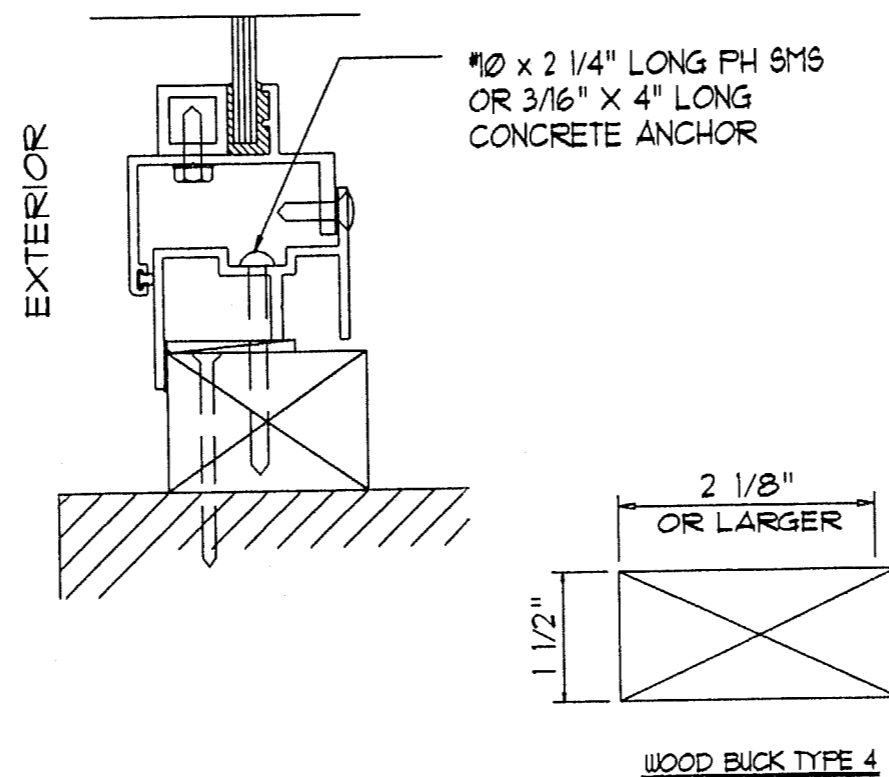
CONCRETE ANCHORS MUST HAVE 1 1/4" MINIMUM EMBEDMENT INTO CONCRETE.

#10 X 2 1/4" SCREWS MUST HAVE 1 5/16" MINIMUM EMBEDMENT INTO WOOD.

WOOD BUCK TYPE 3
INSTALLATION DETAIL ON ALL FOUR SIDE



WOOD BUCK TYPE 4
INSTALLATION DETAIL ON ALL FOUR SIDE



PRODUCT RENEWED

ACCEPTANCE No. 01-0112.03
EXPIRATION DATE MAR 06 2002
By *Manuel Perez*
PRODUCT CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFICE

APPROVED AS COMPLYING WITH THE SOUTH FLORIDA BUILDING CODE
DATE MARCH 6 1998
BY *Manuel Perez*
PRODUCT CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFICE
ACCEPTANCE NO. 97-0603.07



construction glass industries corporation
7840 northwest 62 street miami, florida 33166

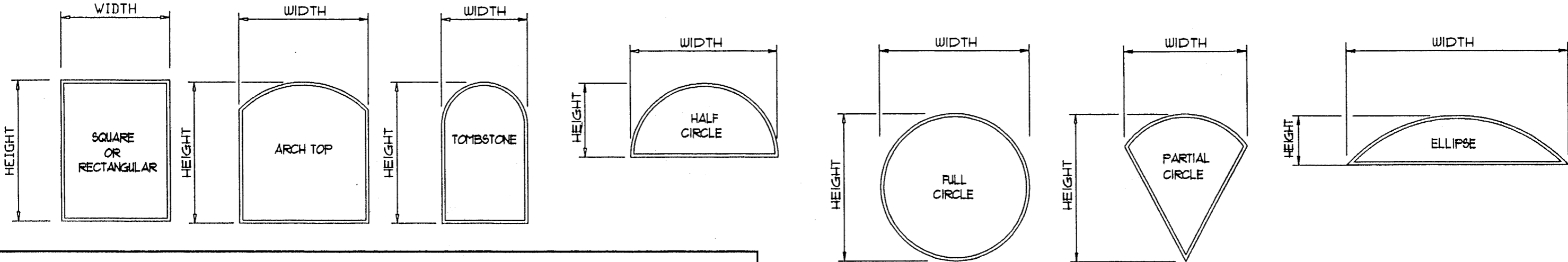
product : Series 238 Designer Fixed Window

dwg. # : 238-DFW

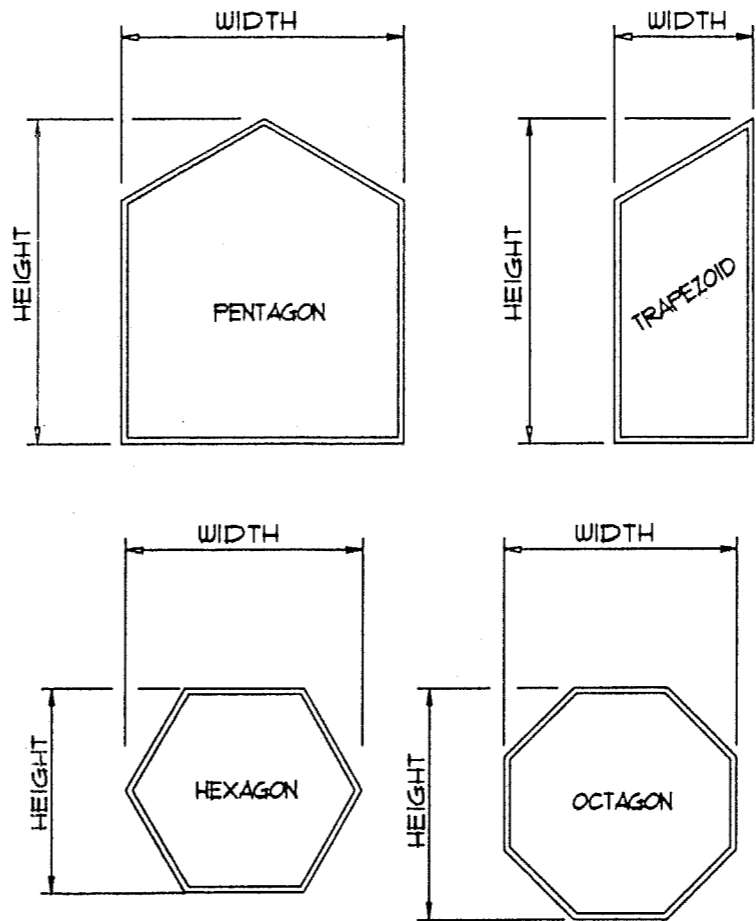
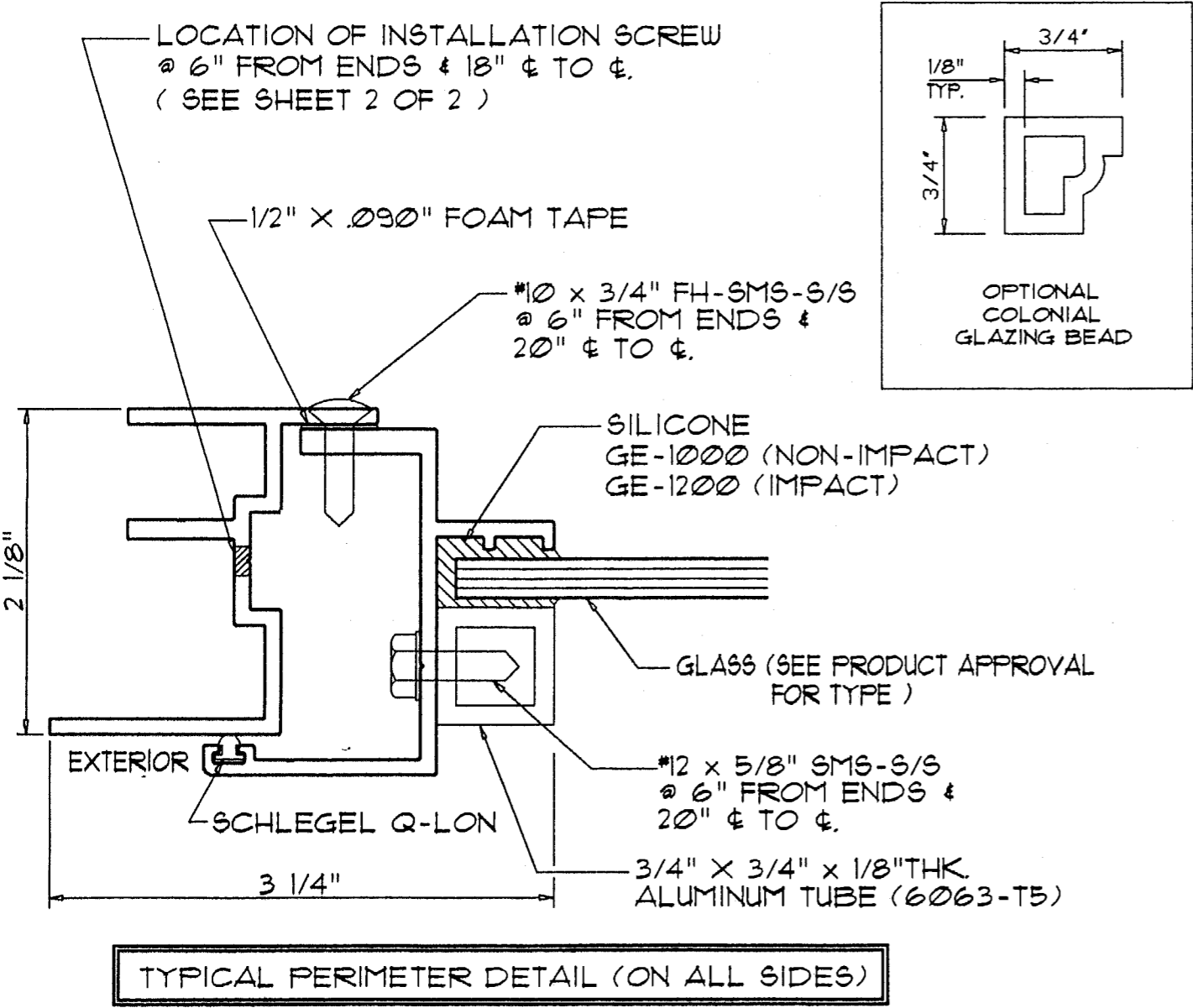
date : Jan. 27, 1998

sheet 2 of 2

SERIES 238 DESIGNER WINDOW SHAPES



REFER TO SHEET 2 OF 2 FOR INSTALLATION CONDITIONS



PRODUCT RENEWED
ACCEPTANCE No. 01-0112.03
EXPIRATION DATE MAR 06 2002
By *Manuel Perez*
PRODUCT CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFICE

APPROVED AS COMPLYING WITH THE
SOUTH FLORIDA BUILDING CODE
DATE MARCH 6 1998
BY *Manuel Perez*
PRODUCT CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFICE
ACCEPTANCE NO. 97-0603.07

CGI™
CORPORATION
construction glass industries corporation
7840 northwest 62 street miami, florida 33166

product : Series 238 Designer Fixed Window	
dwg. # : 238-DFW	
date : Jan. 27, 1998	sheet 1 of 2